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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 955,268	09 18/2001	Michael H. Backman	00AN171	9005

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John M. Miller, Esq.
Rockwell International
Firstar Center
777 East Wisconsin Avenue
Milwaukee, WI 53202

EXAMINER

JONES, JUDSON

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 06/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,268

Applicant(s)

BACKMAN ET AL

Examiner

Judson H. Jones

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/23/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Murai et al. 5,014,625 A or Shimada et al. 5,197,391 A. In claim 1, the phrase "routing system" is interpreted to mean any means for directing an object between alternate routes. "Stage" is interpreted to mean any movable object. Murai et al. discloses a routing system as shown in figure 18 where the stage 155 can move onto one of two branch paths, each path having armature windings 157. Shimada et al. discloses a routing system as shown in figure 4 where a stage 10 can move onto one of two branch paths as described in column 5 lines 47-51, each path having armature windings as described in column 2 lines 20-26.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada et al. in view of Japanese reference JP 03007003A. (A translation of Japanese reference '003 will be supplied in the next office action.) Shimada et al. discloses a routing system where a stage can

move onto one of two branch paths but does not disclose a bridge moveable between first and second positions. Japanese reference '003 discloses a bridge 50 as shown in figure 6, the bridge being movable between first and second positions to connect track 53 to either track 54 or track 55. Since Japanese reference '003 and Shimada et al. are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a bridge portion to alternately connect path portions quickly and easily.

Claims 6-9, 11-17 and 19-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada et al. as modified by Japanese reference '003 in view of Laurent et al. 6,257,604 B1 and Svensson 5,845,581 A. Shimada et al. as modified by Japanese reference '003 discloses the routing system with a bridge portion but does not disclose using a linear motor to move the bridge portion. Shimada et al. only states, "... the branch track 7a or the side track 7b may be movable ..." The Japanese reference has not been translated. Svensson teaches in column 10 lines 47-61 that a crank motor, driven rollers or a hydraulic cylinder can be used to move a bridge portion for a vehicle pathway. Since Svensson and Shimada et al. as modified by Japanese reference '003 are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a hydraulic cylinder or a motor to move a bridge portion of a vehicle pathway. Laurent et al. 6,257,604 teaches that an electric motor has some advantages over a hydraulic motor in column 2 lines 46-58. Since Laurent et al. and Shimada et al. as modified by Japanese reference '003 and Svensson are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a linear motor instead of a hydraulic cylinder in

order to move a bridge portion linearly because electronic control makes it possible to run an electric motor more rapidly and more directly than a hydraulic or pneumatic component.

In regard to claims 7 and 16, see Svensson figure 9 and column 9 lines 29-60. Since Svensson and Shimada as modified by Japanese reference '003 are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a rotatable bridge portion in place of a bridge portion where both ends of the bridge move for the purpose of reducing the size of the area needed for the bridge portion. This reduction in size is important both for a wafer transport system as taught by Shimada et al. because wafer processing is done in clean rooms which are expensive to maintain and therefore must be as small as possible and also for a monorail train as taught by Svensson because monorail trains are used in densely populated areas where real estate is expensive.

In regard to claims 8 and 19, see Laurent et al. column 2 lines 46-49.

In regard to claims 9, 17 and 27, Shimada et al. discloses a set of armature windings for the main path portion in column 2 lines 20-26 and mentions the existence of a branch pathway in column 2 lines 54-61. While Shimada et al. does not specifically mention that the branch portions have armature windings, they would necessarily have to have armature winding in order for the device to work. As the stage moved from the main path across the bridge and approached one of the branch paths, the energized windings of the branch path would effect movement of the stage between the first path portion and the selected branch portion.

In regard to claim 11, the limitation of armature windings is met by the electric motor as taught by Laurent et al.

In regard to claim 14, see the arrow indicating direction of movement in Japanese reference '003 figure 6.

In regard to claims 15 and 27, see Japanese reference '003 figure 6.

In regard to claims 20 and 23, see Japanese reference '003 figures 2 and 4.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada et al. as modified by Japanese reference '003 as applied to claim 3 and further in view of Hirtz 5,156,092 A. Shimada et al. as modified by Japanese reference '003 discloses the routing system with a bridge portion but does not disclose branch portions at different levels. Hirtz recognizes that branch pathways can be located on different levels in column 3 lines 4-8. Since Hirtz and Shimada et al. as modified by Japanese reference '003 are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a routing system to route a stage between a main path and a branch path on a different level.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada et al. as modified by Japanese reference '003, Svensson and Laurent et al. as applied to claim 11 and further in view of Hirtz 5,156,092 A. Shimada et al. as modified by Japanese reference '003, Svensson and Laurent discloses the routing system with a bridge portion but does not disclose branch portions at different levels. Hirtz recognizes that branch pathways can be located on different levels in column 3 lines 4-8. Since Hirtz and Shimada et al. as modified by Japanese reference '003, Svensson and Laurent are from the same field of endeavor it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a routing system to route a stage between a main path and a branch path on a different level.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judson H Jones whose telephone number is 703-308-0115. The examiner can normally be reached on 8-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JHJ *[Signature]*
June 20, 2003

[Signature]
KARL TAMAI
PRIMARY EXAMINER